Carver County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

## AA--Kasota sandy loam, 0 to 2 percent slopes

#### Kasota

Extent: 85 percent of the unit

Landform(s): stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A	0 to 9 in	sandy loam	moderately rapid	1.09 to 1.63 in	5.6 to 7.3
Bt	9 to 30 in	clay loam	moderate	2.50 to 3.76 in	5.6 to 6.5
2C 3	30 to 60 in	sand	rapid	0.60 to 1.80 in	7.4 to 8.4

# AB2--Kasota sandy loam, 2 to 6 percent slopes, eroded

#### Kasota, eroded

Extent: 85 percent of the unit

Landform(s): stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap	0 to 9 in	sandy loam	moderately rapid	1.09 to 1.63 in	5.6 to 7.3
Bt	9 to 26 in	clay loam	moderate	2.03 to 3.05 in	5.6 to 6.5
2C 2	6 to 60 in	sand	rapid	0.68 to 2.03 in	7.4 to 8.4



Carver County, Minnesota

## AD--Hawick sandy loam, 18 to 25 percent slopes

#### **Hawick**

Extent: 90 percent of the unit

Landform(s): stream terraces

Slope gradient: 18 to 25 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 7s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
A	0 to 5 in	sandy loam	moderately rapid	0.67 to 0.77 in	6.1 to 7.8
Bw	5 to 18 in	loamy sand	rapid	0.39 to 1.30 in	6.1 to 7.8
C 1	8 to 60 in	gravelly coarse sand	very rapid	0.83 to 2.50 in	7.4 to 8.4

# AE--Hawick loamy sand, 18 to 40 percent slopes

#### Hawick

Extent: 90 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Slope gradient: 18 to 40 percent

Wind erodibility index (WEI): 134

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 7s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative so	oil profile:	Texture	Permeability	Available water capacity	рН
A 0	to 4 in	loamy sand	rapid	0.39 to 0.47 in	6.1 to 7.8
Bw 4	to 10 in	loamy sand	rapid	0.18 to 0.59 in	6.1 to 7.8
C 10	to 60 in	stratified gravelly coarse sand to sand	very rapid	1.00 to 3.00 in	7.4 to 8.4



Carver County, Minnesota

# BA--Kasota loam, 0 to 2 percent slopes

#### Kasota

Extent: 85 percent of the unit
Landform(s): stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated: 2s

Hydric soil: no Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 11 in	loam	moderately rapid	2.20 to 2.65 in	5.6 to 7.3
Bt 11 to 28 in	clay	moderately slow	1.69 to 3.05 in	5.6 to 6.5
2BC 28 to 40 in	loamy sand	rapid	0.61 to 0.85 in	6.1 to 7.3
2C 40 to 60 in	sand	rapid	0.39 to 1.18 in	7.4 to 8.4

Carver County, Minnesota

## BB2--Kasota loam, 2 to 6 percent slopes, eroded

#### Kasota, eroded

Extent: 85 percent of the unit

Landform(s): stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: C

Drainage class: well drained Potential for frost action: moderate

Representative	soil profil	e: Texture	Permeability	capacity	pН
Ap (	0 to 9 in	loam	moderate	1.81 to 2.17 in	5.6 to 7.3
Bt 9	9 to 24 in	clay	moderately slow	1.50 to 2.69 in	5.6 to 6.5
2BC 24	4 to 36 in	loamy sand	rapid	0.59 to 0.83 in	6.1 to 7.3
2C 36	6 to 60 in	sand	rapid	0.48 to 1.44 in	7.4 to 8.4

### BH--Blue Earth mucky silt loam

### **Blue Earth**

Extent: 90 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): flood plains, depressions on moraines

Wind erodibility group (WEG): 4L

Slope gradient: 0 to 1 percent

Wind erodibility index (WEI): 86

Parent material: coprogenous earth

Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6w

Flooding: frequent

Hydric soil: yes

Ponding: frequent

Hydrologic group: B/D

Drainage class: very poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
A 0 to 42 in	mucky silt loam	moderate	7.58 to 10.11 in	7.4 to 8.4
Cg 42 to 60 in	mucky silt loam	moderate	3.19 to 4.25 in	7.4 to 8.4



Carver County, Minnesota

# **BY--Biscay loam**

## **Biscay**

Soil loss tolerance (T factor): 3 Extent: 90 percent of the unit Wind erodibility group (WEG): 6

Landform(s): drainageways on stream terraces, drainageways

on moraines

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 48 Parent material: outwash Kw factor (surface layer) .20 Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2w

Flooding: none Hydric soil: yes Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative s	oil profile:	Texture	Permeability	Available water capacity	рН
Ap,A1,A2 0	to 20 in	loam	moderate	4.02 to 4.42 in	6.1 to 7.8
Bg 20	to 28 in	loam	moderate	1.34 to 1.50 in	6.6 to 7.8
2BCg 28	to 36 in	gravelly loam	moderately rapid	0.87 to 1.34 in	6.6 to 7.8
2Cg 36	to 60 in	stratified gravelly coarse sand to loamy sand	rapid	0.48 to 0.96 in	7.4 to 8.4

Carver County, Minnesota

# CC3--Lester clay loam, 6 to 12 percent slopes, severely eroded

## Lester, severely eroded

Extent: 100 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil p	rofile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 7	in clay loam		moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 3	8 in clay loam		moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 6	0 in loam		moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 8	0 in loam		moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

# CD3--Lester clay loam, 12 to 18 percent slopes, severely eroded

## Lester, severely eroded

Extent: 100 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	e: Texture	Permeability	capacity	pН
Ap 0 to 7 in	clay loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



A collecte contact

Carver County, Minnesota

## CE3--Lester clay loam, 18 to 25 percent slopes, severely eroded

### Lester, severely eroded

Extent: 100 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 7e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	: Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	clay loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### CH--Chaska loam, occasionally flooded

#### Chaska, occasionally flooded

Extent: 90 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): flood plains

Wind erodibility group (WEG): 4L

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 86

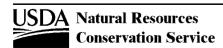
Parent material: alluvium Kw factor (surface layer) .32

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2w

Flooding: occasional Hydric soil: no
Ponding: none Hydrologic group: B/D

Drainage class: somewhat poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap	0 to 9 in	silty clay loam	moderate	1.99 to 2.17 in	6.6 to 7.8
A	9 to 36 in	silty clay loam	moderate	4.55 to 5.09 in	7.4 to 7.8
C 3	6 to 60 in	loam	moderately rapid	1.68 to 3.84 in	7.4 to 8.4



Carver County, Minnesota

## CL--Coland clay loam, occasionally flooded

# Coland, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flats on flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 48

Parent material: alluvium

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2w
Flooding: occasional

Hydric soil: yes

Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
A 10 to 48 in	clay loam	moderate	7.64 to 8.40 in	6.1 to 7.3
Ca 48 to 60 in	loam	moderately rapid	1.54 to 2.01 in	6.1 to 7.8

## CO--Cordova clay loam

#### Cordova

Extent: 90 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): drainageways on moraines

Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 48

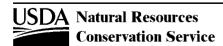
Parent material: till Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2w

Flooding: none Hydric soil: yes
Ponding: none Hydrologic group: C/D

Drainage class: poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,AB C	) to 13 in	loam	moderate	2.34 to 2.86 in	6.1 to 7.3
Btg 13	3 to 33 in	clay loam	moderately slow	3.01 to 3.81 in	5.1 to 6.5
Cg 33	3 to 80 in	loam	moderate	7.03 to 8.90 in	7.4 to 8.4



Carver County, Minnesota

## CS--Canisteo silty clay loam, depressional

## Canisteo, depressional

Extent: 85 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): depressions on moraines

Wind erodibility group (WEG): 4L

Slope gradient: 0 to 1 percent Wind erodibility index (WEI): 86

Parent material: till

Kw factor (surface layer) .24

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Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3w

Flooding: none

Hydric soil: yes

Ponding: frequent Hydrologic group: B/D

Drainage class: very poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A	0 to 18 in	silty clay loam	moderate	3.26 to 3.98 in	7.4 to 8.4
Bkg 1	8 to 39 in	loam	moderate	3.13 to 3.96 in	7.4 to 8.4
Ca 3	89 to 80 in	loam	moderate	6.14 to 7.78 in	7.4 to 8.4

## CT--Canisteo clay loam

#### Canisteo

Extent: 85 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): flats on moraines, swales on moraines

Wind erodibility group (WEG): 4L

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 86

Parent material: till Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

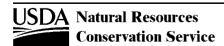
Land capability, nonirrigated: 2w
Flooding: none

Hydric soil: yes

Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 18 in	clay loam	moderate	3.26 to 3.98 in	7.4 to 8.4
Bkg 18 to 39 in	loam	moderate	3.13 to 3.96 in	7.4 to 8.4
Cg 39 to 80 in	loam	moderate	6.14 to 7.78 in	7.4 to 8.4



Carver County, Minnesota

# CU--Coland clay loam, frequently flooded

## Coland, frequently flooded

Extent: 90 percent of the unit Landform(s): flats on flood plains Slope gradient: 0 to 2 percent Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5 Wind erodibility group (WEG): 6 Wind erodibility index (WEI): 48 Kw factor (surface layer) .20 Land capability, nonirrigated: 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap (	0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
A 10	0 to 48 in	clay loam	moderate	7.64 to 8.40 in	6.1 to 7.3
Cg 48	8 to 60 in	loam	moderately rapid	1.54 to 2.01 in	6.1 to 7.8

Carver County, Minnesota

### **CW--Cordova-Webster complex**

#### Cordova

Extent: 65 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): drainageways on moraines Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2w

Flooding: none Hydric soil: yes
Ponding: none Hydrologic group: C/D

Drainage class: poorly drained Potential for frost action: high

Representative	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap,AB	0 to 13 in	loam	moderate	2.34 to 2.86 in	6.1 to 7.3
Btg	13 to 33 in	clay loam	moderately slow	3.01 to 3.81 in	5.1 to 6.5
Cg :	33 to 80 in	loam	moderate	7.03 to 8.90 in	7.4 to 8.4

### Webster

Extent: 30 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): drainageways on moraines Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2w

Flooding: none Hydric soil: yes
Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0	) to 14 in	loam	moderate	2.69 to 2.98 in	6.6 to 7.3
Bg 14	to 20 in	clay loam	moderate	0.94 to 1.06 in	6.6 to 7.8
Cg 20	) to 60 in	loam	moderate	5.57 to 7.56 in	7.4 to 8.4



Carver County, Minnesota

## DA--Dakota and Rasset sandy loams, 0 to 2 percent slopes

#### **Dakota**

Extent: 50 percent of the unit

Landform(s): stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated: 2s

Flooding: none

Hydric soil: no
Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	рН
Ap	0 to 10 in	sandy loam	moderate	1.18 to 1.77 in	5.1 to 7.3
Bt 1	10 to 30 in	loam	moderate	3.01 to 3.81 in	5.1 to 7.3
2BC,2C 3	30 to 60 in	fine sand	rapid	0.60 to 2.99 in	5.1 to 7.8

#### Rasset

Extent: 50 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 1 to 2 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative soil profi	le: Texture	Permeability	Available water capacity	рН
Ap,A 0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 15 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8



A collecte contact

Carver County, Minnesota

## DB--Dakota and Rasset sandy loams, 2 to 6 percent slopes

#### Dakota

Extent: 50 percent of the unit

Landform(s): stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated: 2e

Flooding: none

Hydric soil: no
Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	рН
Ap	0 to 10 in	sandy loam	moderate	1.18 to 1.77 in	5.1 to 7.3
Bt 1	10 to 30 in	loam	moderate	3.01 to 3.81 in	5.1 to 7.3
2BC,2C 3	30 to 60 in	fine sand	rapid	0.60 to 2.99 in	5.1 to 7.8

#### Rasset

Extent: 50 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative soil prof	ïle: Texture	Permeability	capacity	рН
Ap,A 0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 15 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8



A collecte contact

Available water

Carver County, Minnesota

# EA--Estherville sandy loam, 0 to 2 percent slopes

#### **Estherville**

Extent: 90 percent of the unit

Soil loss tolerance (T factor): 2

Landform(s): stream terraces, moraines

Wind erodibility group (WEG): 3

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile	e: Texture	Permeability	capacity	рН
Ap,A 0 to 13 in	sandy loam	moderately rapid	1.69 to 2.34 in	5.6 to 7.3
Bw1 13 to 18 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 18 to 23 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4



Carver County, Minnesota

# EB--Estherville sandy loam, 2 to 6 percent slopes

#### **Estherville**

Extent: 90 percent of the unit

Landform(s): stream terraces, moraines

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative	soil profile:	Texture	Permeability	capacity	рН
Ap,A	0 to 13 in	sandy loam	moderately rapid	1.69 to 2.34 in	5.6 to 7.3
Bw1 1	3 to 18 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 1	8 to 23 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C 2	3 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4



A collecte contact

Carver County, Minnesota

# EB2--Estherville sandy loam, 2 to 6 percent slopes, eroded

#### Estherville, eroded

Extent: 90 percent of the unit

Landform(s): stream terraces, moraines

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
Bw1 10 to 15 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 15 to 20 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C 20 to 60 in	gravelly coarse sand	rapid	0.80 to 1.61 in	6.6 to 8.4

### **EX--Essexville sandy loam**

### **Essexville**

Extent: 85 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): beaches on lakes, moraines Wind erodibility group (WEG): 3

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 86
Parent material: sandy beach sediments Kw factor (surface layer) .10

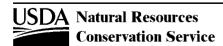
Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 5w

Flooding: none Hydric soil: yes
Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.69 in	7.4 to 8.4
Bg 1	5 to 30 in	sand	rapid	0.60 to 1.80 in	7.4 to 8.4
2Cq 3	30 to 80 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4



Carver County, Minnesota

## FA--Fairhaven silt loam, 0 to 2 percent slopes

#### **Fairhaven**

Extent: 100 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 48

Parent material: outwash

Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 10 in	silt loam	moderate	2.17 to 2.36 in	5.6 to 7.3
Bw 10 to 31 in	silt loam	moderate	4.25 to 4.68 in	5.6 to 7.3
2C 31 to 60 in	sand	rapid	0.57 to 1.15 in	6.1 to 8.4

# FB--Fairhaven silt loam, 2 to 6 percent slopes

#### **Fairhaven**

Extent: 100 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 48

Parent material: outwash

Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative s	soil profile:	Texture	Permeability	capacity	рН
Ap 0	to 10 in	silt loam	moderate	2.17 to 2.36 in	5.6 to 7.3
Bw 10	to 31 in	silt loam	moderate	4.25 to 4.68 in	5.6 to 7.3
2C 31	to 60 in	sand	rapid	0.57 to 1.15 in	6.1 to 8.4



Available water

Carver County, Minnesota

## FC2--Fairhaven silt loam, 6 to 12 percent slopes, eroded

#### Fairhaven, eroded

Extent: 100 percent of the unit

Landform(s): stream terraces

Soll loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: outwash

Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	pН
Ap 0 to 7 in	silt loam	moderate	1.56 to 1.70 in	5.6 to 7.3
Bw 7 to 25 in	silt loam	moderate	3.62 to 3.98 in	5.6 to 7.3
2C 25 to 60 in	sand	rapid	0.69 to 1.39 in	6.1 to 8.4

### **GL--Glencoe clay loam**

**Ponding:** frequent

#### **Glencoe**

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Wind erodibility group (WEG): 6

Slope gradient: 0 to 1 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Flooding: none

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

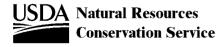
Wind erodibility index (WEI): 48

Land capability, nonirrigated: 3w

Hydric soil: yes

Drainage class: very poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 10 in	clay loam	moderate	1.77 to 2.17 in	6.1 to 7.8
A,ABg 10 to 35 in	clay loam	moderate	4.54 to 5.54 in	6.1 to 7.8
Bg 35 to 48 in	loam	moderate	1.95 to 2.47 in	6.6 to 7.8
Ca 48 to 60 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4



Hydrologic group: B/D

Carver County, Minnesota

## **GP--Pits-Udipsamments complex**

#### **Pits**

Extent: 55 percent of the unit

Landform(s): stream terraces, outwash plains, moraines

Slope gradient: 0 to 50 percent

Parent material: sandy and gravelly outwash Restrictive feature(s): greater than 60 inches

Flooding: Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Available water Permeability Texture рН Representative soil profile: capacity

#### **Udipsamments**

Extent: 45 percent of the unit

Landform(s): stream terraces, outwash plains, moraines

Slope gradient: 0 to 25 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

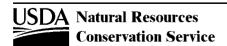
Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Available water Texture Permeability рН Representative soil profile: capacity



Carver County, Minnesota

## HC--Estherville-Hawick sandy loams, 6 to 12 percent slopes

#### **Estherville**

Extent: 60 percent of the unit Soil loss tolerance (T factor): 2

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile:	Texture	Permeability	capacity	рН
Ap,A 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
Bw1 10 to 15 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 15 to 20 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C 20 to 60 in	gravelly coarse sand	rapid	0.80 to 1.61 in	6.6 to 8.4

#### **Hawick**

Extent: 30 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4s

Flooding: none Hydric soil: no

Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	6.1 to 7.8
Bw	7 to 11 in	gravelly loamy coarse sand	rapid	0.12 to 0.39 in	6.1 to 7.8
C 1	11 to 60 in	gravelly coarse sand	very rapid	0.98 to 2.93 in	7.4 to 8.4



Carver County, Minnesota

## HC2--Estherville-Hawick sandy loams, 6 to 12 percent slopes, eroded

#### Estherville, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 2

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile	Texture	Permeability	capacity	pН
Ap,A 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bw1 8 to 13 in	sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
2Bw2 13 to 18 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C 18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	6.6 to 8.4

#### Hawick, eroded

Extent: 30 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	6.1 to 7.8
Bw	7 to 11 in	gravelly loamy coarse sand	rapid	0.12 to 0.39 in	6.1 to 7.8
C 1	1 to 60 in	gravelly coarse sand	very rapid	0.98 to 2.93 in	7.4 to 8.4



Carver County, Minnesota

## HD--Estherville-Hawick sandy loams, 12 to 18 percent slopes

#### **Estherville**

Extent: 60 percent of the unit Soil loss tolerance (T factor): 2

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 3

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
Bw1 10 to 15 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 15 to 18 in	loamy coarse sand	rapid	0.07 to 0.14 in	5.6 to 7.3
2C 18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	6.6 to 8.4

#### **Hawick**

Extent: 30 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 3

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6s

Flooding: none Hydric soil: no

Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative soil profile	: Texture	Permeability	capacity	рН
Ap 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	6.1 to 7.8
Bw 7 to 11 in	gravelly loamy coarse sand	rapid	0.12 to 0.39 in	6.1 to 7.8
C 11 to 60 in	gravelly coarse sand	very rapid	0.98 to 2.93 in	7.4 to 8.4



Carver County, Minnesota

#### **HM--Hamel loam**

#### Hamel

Extent: 90 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): drainageways on moraines Wind erodibility group (WEG): 6

Slope gradient: 1 to 3 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .28
Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2w

Flooding: none

Hydric soil: yes

Ponding: none

Hydrologic group: C/D

Drainage class: poorly drained Potential for frost action: high

Representative soil profile	e: Texture	Permeability	Available water capacity	рН
Ap,A,AB 0 to 24 in	loam	moderate	4.80 to 5.76 in	5.6 to 7.3
Btg 24 to 46 in	clay loam	moderately slow	3.53 to 4.19 in	5.6 to 7.3
Ca 46 to 60 in	loam	moderate	2.07 to 2.62 in	7.4 to 8.4

#### **HN--Hanlon loam**

#### Hanlon, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 48

Parent material: alluvium

Kw factor (surface layer) .28

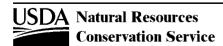
Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2s

Flooding: occasional Hydric soil: no
Ponding: none Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
A1 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
A2,A3 10 to 63 in	fine sandy loam	moderately rapid	8.50 to 9.57 in	6.1 to 7.3
Bw 63 to 70 in	sandy loam	moderately rapid	0.78 to 0.92 in	5.6 to 7.3
Cg 70 to 80 in	stratified sand to loamy fine sand to fine sandy loam	moderately rapid	1.18 to 1.87 in	5.6 to 7.8



This report shows only the major soils in each map unit

Carver County, Minnesota

# IA--Dickman sandy loam, 0 to 2 percent slopes

#### **Dickman**

Extent: 90 percent of the unit

Landform(s): stream terraces

Solope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Solope Solope Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated

Flooding: none

Hydric soil: no

Ponding: none Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile	: Texture	Permeability	capacity	pН
Ap,A 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	5.6 to 6.5
Bw 14 to 19 in	sandy loam	moderately rapid	0.57 to 0.66 in	5.6 to 7.3
2Bw 19 to 33 in	loamy sand	rapid	0.43 to 1.42 in	5.6 to 7.3
2C 33 to 60 in	sand	rapid	0.54 to 1.87 in	6.1 to 7.8



Carver County, Minnesota

# IB2--Dickman sandy loam, 2 to 6 percent slopes, eroded

## Dickman, eroded

Extent: 90 percent of the unit

Landform(s): stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative	soil profile:	Texture	Permeability	capacity	рН
Ap,A	0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	5.6 to 6.5
Bw 1	2 to 19 in	sandy loam	moderately rapid	0.85 to 0.99 in	5.6 to 7.3
2Bw 1	9 to 33 in	loamy sand	rapid	0.43 to 1.42 in	5.6 to 7.3
2C 3	3 to 60 in	sand	rapid	0.54 to 1.87 in	6.1 to 7.8



Carver County, Minnesota

# IC2--Dickman sandy loam, 6 to 12 percent slopes, eroded

### Dickman, eroded

Extent: 90 percent of the unit

Landform(s): stream terraces

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: somewhat excessively drained Potential for frost action: low

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.48 in	5.6 to 6.5
Bw 10 to 17 in	sandy loam	moderately rapid	0.85 to 0.99 in	5.6 to 7.3
2Bw 17 to 31 in	loamy sand	rapid	0.43 to 1.42 in	5.6 to 7.3
2C 31 to 60 in	sand	rapid	0.57 to 2.01 in	6.1 to 7.8



Carver County, Minnesota

## KB--Kilkenny-Lester loams, 2 to 6 percent slopes

#### Kilkenny

Extent: 60 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 6 percent Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: C/D

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil p	orofile:	Texture	Permeability	Available water capacity	рН
Ap 0 to	11 in I	loam	moderate	1.98 to 2.43 in	5.6 to 7.3
Bt 11 to 3	35 in (	clay loam	moderately slow	3.60 to 4.56 in	5.1 to 7.3
2Bk,2C 35 to 8	80 in I	loam	moderate	6.73 to 8.53 in	7.4 to 8.4

#### Lester

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 5 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	e: Te.	xture	Permeability	Available water capacity	рН
Ap 0 to 8 in	loam		moderate	1.57 to 1.73 in	5.6 to 7.3
Bt 8 to 35 in	clay loam		moderate	4.07 to 5.16 in	5.1 to 7.3
BC 35 to 40 in	clay loam		moderate	0.72 to 0.97 in	6.1 to 7.8
C 40 to 60 in	loam		moderate	2.95 to 3.74 in	7.4 to 8.4



Carver County, Minnesota

## KB2--Lester-Kilkenny loams, 2 to 6 percent slopes, eroded

#### Lester, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 5 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bt 8 to 35 in	clay loam	moderate	4.07 to 5.16 in	5.1 to 7.3
Bk 35 to 58 in	loam	moderate	3.43 to 4.34 in	7.4 to 8.4
C 58 to 80 in	loam	moderate	3.31 to 4.19 in	7.4 to 8.4

### Kilkenny, eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 6 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no

Ponding: none Hydrologic group: C/D

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 11 in	loam	moderate	1.98 to 2.43 in	5.6 to 7.3
Bt 11 to 35 in	clay loam	moderately slow	3.60 to 4.56 in	5.1 to 7.3
2Bk.2C 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4



Carver County, Minnesota

## KC--Lester-Kilkenny loams, 6 to 12 percent slopes

#### Lester

Extent: 60 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48
Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

#### Kilkenny

Extent: 40 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representativ	e soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 9 in	loam	moderate	1.54 to 1.99 in	5.6 to 7.3
Bt	9 to 53 in	clay loam	moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC,2C	53 to 80 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4



Carver County, Minnesota

# KC2--Lester-Kilkenny loams, 6 to 12 percent slopes, eroded

#### Lester, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no Ponding: none Hydrologic group: B

Potential for frost action: moderate Drainage class: well drained

Representative soil profile.	Texture	Permeability	capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Kilkenny, eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48 Slope gradient: 6 to 12 percent

Kw factor (surface layer) .24 Parent material: till

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Hydric soil: no Flooding: none

Ponding: none Hydrologic group: C Potential for frost action: moderate

Representative s	oil profile:	Texture	Permeability	capacity	рН
Ap 0	to 9 in	loam	moderate	1.54 to 1.99 in	5.6 to 7.3
Bt 9	to 53 in	clay loam	moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC,2C 53	to 80 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4



Drainage class: moderately well drained

Available water

Available water

Carver County, Minnesota

## KD--Lester-Kilkenny loams, 12 to 18 percent slopes

#### Lester

Extent: 60 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48
Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

#### **Kilkenny**

Extent: 40 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representativ	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap	0 to 9 in	loam	moderate	1.54 to 1.99 in	5.6 to 7.3
Bt	9 to 53 in	clay loam	moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC,2C	53 to 80 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4



A collecte contact

Carver County, Minnesota

# KD2--Lester-Kilkenny loams, 12 to 18 percent slopes, eroded

#### Lester, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24
Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no

Drainage class: well drained Potential for frost action: moderate

Hydrologic group: B

Representative soil profile	Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Kilkenny, eroded

Ponding: none

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no

Ponding: none Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representativ	e soil profile:		Texture	Permeability	Available water capacity	pН
Ap	0 to 9 in	loam		moderate	1.54 to 1.99 in	5.6 to 7.3
Bt	9 to 53 in	clay loam		moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC,2C	53 to 80 in	loam		moderate	4.02 to 5.09 in	7.4 to 8.4



Carver County, Minnesota

# KE2--Lester-Kilkenny loams, 18 to 25 percent slopes, eroded

#### Lester, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6e

Flooding: none

Hydric soil: no

Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	Texture	Permeability	Available water capacity	рН
A 0 to 5 in	loam	moderate	1.02 to 1.13 in	5.6 to 7.3
BE,Bt 5 to 34 in	clay loam	moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Kilkenny, eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6e

Flooding: none

Hydric soil: no

Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Α	0 to 7 in	loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt	7 to 31 in	clay loam	moderately slow	3.60 to 4.56 in	5.1 to 7.3
2Bk.2C 3	1 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4



Carver County, Minnesota

## KF--Lester-Kilkenny loams, 25 to 40 percent slopes

#### Lester

Extent: 60 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 25 to 40 percent Wind erodibility index (WEI): 48
Parent material: till Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 7e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil p	rofile:	Texture	Permeability	capacity	рН
A 0 to 5	in loam		moderate	1.02 to 1.13 in	5.6 to 7.3
BE,Bt 5 to 3	4 in clay loam		moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 34 to 6	0 in loam		moderate	3.90 to 4.94 in	7.4 to 8.4
C 60 to 8	0 in loam		moderate	3.01 to 3.81 in	7.4 to 8.4

#### **Kilkenny**

Extent: 40 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 25 to 35 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 7e

Flooding: none

Hydric soil: no
Ponding: none

Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representativ	e soil profile:	Texture	Permeability	Available water capacity	рН
A	0 to 7 in	loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt	7 to 31 in	clay loam	moderately slow	3.60 to 4.56 in	5.1 to 7.3
2Bk,2C	31 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4



A collecte contact

Carver County, Minnesota

## KL--Hanlon-Kalmarville complex, frequently flooded

## Hanlon, frequently flooded

Extent: 55 percent of the unit

Landform(s): rises on flood plains

Slope gradient: 1 to 3 percent

Parent material: alluvium

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 5w

Flooding: frequent

Hydric soil: no

Ponding: none

Hydrologic group: A/D

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН	
A1 0 to 16 in	fine sandy loam	moderately rapid	2.58 to 2.91 in	6.1 to 7.3	
A2 16 to 40 in	fine sandy loam	moderately rapid	3.84 to 4.32 in	6.1 to 7.3	
Bw 40 to 60 in	fine sandy loam	moderately rapid	2 17 to 2 56 in	5.6 to 7.3	

#### Kalmarville, frequently flooded

Extent: 40 percent of the unit

Landform(s): flats on flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Slope gradient: 0 to 1 percent

Wind erodibility index (WEI): 86

Parent material: alluvium

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 5w
Flooding: frequent

Hydric soil: yes

Flooding: frequent

Hydric soil: yes

Ponding: none

Hydrologic group: A/D

Drainage class: poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	capacity	рН
A1,A2,A3	0 to 32 in	sandy loam	moderately rapid	4.15 to 5.74 in	6.6 to 7.8
A4 3	32 to 60 in	silt loam	moderately rapid	3.63 to 5.03 in	6.6 to 7.8



A collecte contact

Available water

Carver County, Minnesota

## KM--Minneiska-Kalmarville complex, frequently flooded

## Minneiska, frequently flooded

Extent: 55 percent of the unit

Landform(s): rises on flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 86

Parent material: alluvium

Kw factor (surface layer) .24

Parent material: alluvium

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 5w

Flooding: frequent Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: moderately well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	рН
Ap	0 to 10 in	fine sandy loam	moderately rapid	1.48 to 1.77 in	7.4 to 8.4
C 1	0 to 60 in	stratified sand to silt loam	moderately rapid	6.50 to 9.00 in	7.4 to 8.4

## Kalmarville, frequently flooded

Extent: 35 percent of the unit

Landform(s): flats on flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Slope gradient: 0 to 1 percent

Wind erodibility index (WEI): 56

Parent material: alluvium

Kw factor (surface layer) .32

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 5w

Flooding: frequent Hydric soil: yes
Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	capacity	рН
A1 0 to 7 in	loam	moderate	1.42 to 1.70 in	5.6 to 7.8
A2,A3 7 to 60 in	stratified fine sand to fine sandy loam to silt loam	moderate	6.86 to 11.61 in	5.6 to 7.8



Available water

Carver County, Minnesota

## LA--Le Sueur-Lester loams, 1 to 4 percent slopes

#### Le Sueur

Extent: 70 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6
Slope gradient: 1 to 3 percent Wind erodibility index (WEI): 48

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 1

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B/D

Drainage class: moderately well drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	capacity	рН
A1,A2,AB	0 to 17 in	loam	moderate	3.39 to 4.06 in	5.6 to 7.3
Bt 1	7 to 36 in	clay loam	moderate	2.83 to 3.59 in	5.1 to 7.3
Bk 3	6 to 46 in	loam	moderate	1.54 to 1.94 in	7.4 to 8.4
C 4	6 to 80 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

#### Lester

Extent: 30 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 4 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil p	rofile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 8	in loam		moderate	1.57 to 1.73 in	5.6 to 7.3
Bt 8 to 3	5 in clay loam		moderate	4.07 to 5.16 in	5.1 to 7.3
BC 35 to 4	0 in clay loam		moderate	0.72 to 0.97 in	6.1 to 7.8
C 40 to 8	0 in loam		moderate	5.96 to 7.56 in	7.4 to 8.4



Carver County, Minnesota

# LB2--Lester loam, 2 to 6 percent slopes

### Lester

Extent: 90 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Representative so	oil profile:	Texture	Permeability	Available water capacity	рН
Ap 0	to 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bt 8 1	to 35 in	clay loam	moderate	4.07 to 5.16 in	5.1 to 7.3
Bk 35	to 58 in	loam	moderate	3.43 to 4.34 in	7.4 to 8.4
C 58	to 80 in	loam	moderate	3.31 to 4.19 in	7.4 to 8.4

Carver County, Minnesota

# LC--Lester loam, 6 to 12 percent slopes

### Lester

Extent: 85 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap (	) to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7	7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38	3 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60	) to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

# LC2--Lester loam, 6 to 12 percent slopes, eroded

### Lester, eroded

Extent: 85 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Representative so	oil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 1	to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 t	to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 f	to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 1	to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

# LD--Lester loam, 12 to 18 percent slopes

### Lester

Extent: 85 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

## LD2--Lester loam, 12 to 18 percent slopes, eroded

### Lester, eroded

Extent: 85 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG):

Landform(s): moraines Wind erodibility group (WEG): 6
Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24
Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no
Ponding: none

Hydrologic group: B

Representativ	ve soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt	7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk	38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C	60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

# LE2--Lester loam, 18 to 25 percent slopes, eroded

### Lester, eroded

Extent: 100 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 6e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Representative soil	il profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to	5 in	loam	moderate	1.02 to 1.13 in	5.6 to 7.3
Bt 5 to	34 in	clay loam	moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 34 to	60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4
C 60 to	80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

# LF--Lester loam, 25 to 40 percent slopes

### Lester

Extent: 100 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6
Slope gradient: 25 to 40 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 7e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Α	0 to 5 in	loam	moderate	1.02 to 1.13 in	5.6 to 7.3
BE,Bt	5 to 34 in	clay loam	moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 3	4 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4
C 6	0 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

Carver County, Minnesota

### LS--Le Sueur Ioam

#### Le Sueur

Extent: 90 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 1 to 3 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 1

Flooding: none Hydric soil: no

Ponding: none Hydrologic group: B/D

Drainage class: moderately well drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	capacity	pН
A1,A2,AB 0 to 17 in	loam	moderate	3.39 to 4.06 in	5.6 to 7.3
Bt 17 to 36 in	clay loam	moderate	2.83 to 3.59 in	5.1 to 7.3
Bk 36 to 46 in	loam	moderate	1.54 to 1.94 in	7.4 to 8.4
C 46 to 80 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

### M-W--Water, miscellaneous

#### Water, miscellaneous

Extent: 100 percent of the unit Soil loss tolerance (T factor):

Landform(s): Wind erodibility group (WEG):
Slope gradient: Wind erodibility index (WEI):
Parent material: Kw factor (surface layer)

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated:

Flooding: Hydric soil:

Ponding: Hydrologic group:

Drainage class: Potential for frost action:

Representative soil profile:

Texture

Permeability

Available water capacity

PH



Carver County, Minnesota

## MK--Houghton and Muskego soils

## Houghton

Extent: 50 percent of the unit Soil loss tolerance (T factor): 2

Landform(s): depressions on moraines Wind erodibility group (WEG): 2

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 134

Parent material: organic material Kw factor (surface layer) .02

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3w

Flooding: none Hydric soil: yes
Ponding: frequent Hydrologic group: A/D

Drainage class: very poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Oap 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa 10 to 80 in	muck	moderately rapid	24 53 to 31 54 in	

#### Muskego

Extent: 50 percent of the unit Soil loss tolerance (T factor): 1

Landform(s): depressions on moraines Wind erodibility group (WEG): 2

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 134

Parent material: organic material over coprogenous earth Kw factor (surface layer) .02

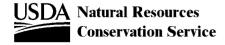
Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4w

Flooding: none Hydric soil: yes
Ponding: frequent Hydrologic group: C/D

Drainage class: very poorly drained Potential for frost action: high

Representative s	soil profile:	Texture	Permeability	Available water capacity	рН
Oap 0	to 9 in	muck	moderately rapid	3.17 to 4.07 in	
Oa 9	to 36 in	muck	moderately rapid	9.37 to 12.05 in	
Lco 36	to 60 in	coprogenous earth	slow	4.32 to 5.76 in	



Carver County, Minnesota

### MN--Minneiska loam

## Minneiska, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 86

Parent material: alluvium

Kw factor (surface layer) .32

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2w
Flooding: occasional

Hydric soil: no

Ponding: none Hydrologic group: B

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 10 in	loam	moderately rapid	1.48 to 2.17 in	7.4 to 8.4
C 10 to 60 in	stratified sand to silt loam	moderately rapid	6.50 to 9.00 in	7 4 to 8 4



Carver County, Minnesota

## MP--Klossner and Muskego soils, ponded

## Klossner, ponded

Extent: 50 percent of the unit

Landform(s): marshes on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material over till Restrictive feature(s): greater than 60 inches

Flooding: none
Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Oa 0 to 26 in	muck	moderately rapid	9.09 to 12.47 in	
2A1 26 to 33 in	silt loam	moderate	1.56 to 1.84 in	
2A2 33 to 40 in	loam	moderate	1.28 to 1.56 in	
2Cg 40 to 80 in	loam	moderate	5.96 to 7.56 in	

### Muskego, ponded

Extent: 50 percent of the unit

Landform(s): marshes on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material over coprogenous earth

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soi	I profile:	Texture	Permeability	Available water capacity	рН
Oa1 0 to	9 in mu	iuck	moderately rapid	3.17 to 4.07 in	
Oa2 9 to	36 in mu	uck	moderately rapid	9.37 to 12.05 in	
Lco 36 to	60 in co	oprogenous earth	slow	4.32 to 5.76 in	



Carver County, Minnesota

## **MY--Mayer loam**

## Mayer

Extent: 85 percent of the unit Landform(s): swales on stream terraces, swales on moraines

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L Wind erodibility index (WEI): 86 Kw factor (surface layer) .28 Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A1,A2	0 to 18 in	loam	moderate	3.62 to 3.98 in	7.4 to 8.4
Bg '	18 to 33 in	sandy clay loam	moderate	2.39 to 2.84 in	7.4 to 8.4
2C 3	33 to 80 in	gravelly coarse sand	rapid	0.94 to 1.87 in	7.4 to 8.4

Carver County, Minnesota

## NC3--Lester-Kilkenny clay loams, 6 to 12 percent slopes, severely eroded

# Lester, severely eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	e: Texture	Permeability	capacity	pН
Ap 0 to 7 in	clay loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Kilkenny, severely eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representative	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap	0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	5.6 to 7.3
Bt	7 to 30 in	clay loam	moderately slow	3.43 to 4.34 in	5.1 to 7.3
2BC,2C 3	30 to 80 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4



Carver County, Minnesota

## ND3--Lester-Kilkenny clay loams, 12 to 18 percent slopes, severely eroded

# Lester, severely eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 7 in	clay loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Kilkenny, severely eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	5.6 to 7.3
Bt	7 to 30 in	clay loam	moderately slow	3.43 to 4.34 in	5.1 to 7.3
2BC.2C 3	30 to 80 in	loam	moderate	7.50 to 9.50 in	7.4 to 8.4



Carver County, Minnesota

## NE3--Lester-Kilkenny clay loams, 18 to 25 percent slopes, severely eroded

### Lester, severely eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24 Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 7e

Hydric soil: no Flooding: none Ponding: none Hydrologic group: B

Potential for frost action: moderate Drainage class: well drained

Representative so	oil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 t	to 5 in	clay loam	moderate	0.87 to 1.13 in	5.6 to 7.3
Bt 5 t	to 34 in	clay loam	moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 34 t	to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4
C 60 t	to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Kilkenny, severely eroded

Drainage class: moderately well drained

Extent: 40 percent of the unit Soil loss tolerance (T factor): 4

Landform(s): moraines Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48 Slope gradient: 18 to 25 percent

Kw factor (surface layer) .28 Parent material: till

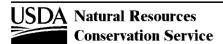
Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 6e

Hydric soil: no Flooding: none

Ponding: none Hydrologic group: C Potential for frost action: moderate

Available water **Texture** Permeability Representative soil profile: capacity A -- 0 to 7 in clay loam moderately slow 1.20 to 1.35 in 5.6 to 7.3

Bt -- 7 to 31 in clay loam moderately slow 3.60 to 4.56 in 5.1 to 7.3 2Bk,2C -- 31 to 80 in loam moderate 7.32 to 9.28 in 7.4 to 8.4



Carver County, Minnesota

# **OS--Oshawa silty clay loam**

## Oshawa, frequently flooded

Extent: 85 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): oxbows on flood plains, flats on flood plains

Wind erodibility group (WEG): 4L

Slope gradient: 0 to 1 percent

Wind erodibility index (WEI): 86

Parent material: alluvium

Kw factor (surface layer) .32

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 6w

Flooding: frequent

Hydric soil: yes

Ponding: frequent

Hydrologic group: C/D

Drainage class: very poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
A 0 to 37 in	silty clay loam	moderately slow	6.66 to 8.14 in	7.4 to 7.8
Cg 37 to 60 in	silty clay loam	moderately slow	3.88 to 4.34 in	7.4 to 7.8

## PA--Sparta loamy sand, 0 to 2 percent slopes

#### **Sparta**

Extent: 90 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 134

Parent material: outwash

Kw factor (surface layer) .17

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4s

Hydric soil: no

Available water

Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative	e soil profile:	Texture	Permeability	capacity	рН
Ap,A	0 to 16 in	loamy sand	moderately rapid	1.45 to 1.94 in	5.1 to 7.3
Bw	16 to 29 in	loamy sand	rapid	0.65 to 1.43 in	5.1 to 7.3
C	29 to 60 in	sand	rapid	1.23 to 2.15 in	5.1 to 7.3



Flooding: none

Carver County, Minnesota

## PB--Sparta loamy sand, 2 to 6 percent slopes

## **Sparta**

Extent: 90 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 134

Parent material: outwash

Kw factor (surface layer) .17

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative soil pro	ofile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 16	in loamy sand		moderately rapid	1.45 to 1.94 in	5.1 to 7.3
Bw 16 to 29	in loamy sand		rapid	0.65 to 1.43 in	5.1 to 7.3
C 29 to 60	in sand		rapid	1.23 to 2.15 in	5.1 to 7.3

## PC--Sparta loamy sand, 6 to 12 percent slopes

#### **Sparta**

Extent: 90 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 134

Parent material: outwash

Kw factor (surface layer) .17

Restrictive feature(s): greater than 60 inches

Flooding: none

Hydric soil: no

Ponding: none Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap	0 to 7 in	loamy sand	moderately rapid	0.64 to 0.85 in	5.1 to 7.3
Bw	7 to 13 in	loamy fine sand	rapid	0.30 to 0.65 in	5.1 to 7.3
C	13 to 60 in	sand	rapid	1.87 to 3.28 in	5.1 to 7.8



Carver County, Minnesota

## PD--Sparta loamy sand, 12 to 18 percent slopes

## **Sparta**

Extent: 90 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Slope gradient: 12 to 18 percent

Wind erodibility index (WEI): 134

Parent material: outwash

Kw factor (surface layer) .17

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 7s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap (	0 to 7 in	loamy sand	moderately rapid	0.64 to 0.85 in	5.1 to 7.3
Bw	7 to 13 in	loamy fine sand	rapid	0.30 to 0.65 in	5.1 to 7.3
C 13	3 to 60 in	sand	rapid	1.87 to 3.28 in	5.1 to 7.8

#### PM--Klossner muck

#### **Klossner**

Extent: 85 percent of the unit Soil loss tolerance (T factor): 1

Landform(s): depressions on moraines Wind erodibility group (WEG): 2

Slope gradient: 0 to 1 percent Wind erodibility index (WEI): 134

Parent material: organic material over till

Kw factor (surface layer) .02

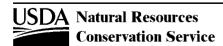
Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3w

Flooding: none Hydric soil: yes
Ponding: frequent Hydrologic group: B/D

Drainage class: very poorly drained Potential for frost action: high

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Oap,Oa 0 to 26 in	muck	moderately rapid	9.09 to 12.47 in	
2A1 26 to 36 in	mucky silty clay loam	moderate	2.17 to 2.56 in	
2A2 36 to 48 in	silty clay loam	moderate	2.20 to 2.69 in	
2Cg 48 to 80 in	loam	moderate	4.78 to 6.06 in	



Carver County, Minnesota

# PS--Klossner muck, sandy substratum

## Klossner, sandy substratum

Extent: 85 percent of the unit Soil loss tolerance (T factor): 1

Landform(s): depressions on stream terraces, depressions on Wind erodibility group (WEG): 2

moraines

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 134

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 6w

Flooding: none Hydric soil: yes
Ponding: frequent Hydrologic group: A/D

Drainage class: very poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Oa	0 to 29 in	muck	moderately rapid	10.20 to 13.11 in	
2A 2	29 to 37 in	sandy clay loam	moderately rapid	1.02 to 1.57 in	
2Cg 3	37 to 60 in	gravelly loamy coarse sand	rapid	0.69 to 2.28 in	

Carver County, Minnesota

# RB--Rasset sandy loam, 0 to 6 percent slopes

### **Rasset**

Extent: 90 percent of the unit

Landform(s): stream terraces

Slope gradient: 0 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated: 3e

Hydric soil: no Hydrologic group: A

Representative soil profil	e: Textu	ure Permeability	Available water capacity	рН
Ap,A 0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 15 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 36 to 80 in	sand	verv rapid	0.88 to 3.09 in	5.1 to 7.8

Carver County, Minnesota

# RC--Rasset sandy loam, 6 to 12 percent slopes

### **Rasset**

Extent: 90 percent of the unit

Landform(s): stream terraces

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated: 4e

Hydric soil: no Hydrologic group: A

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	8 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	6 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

Carver County, Minnesota

# RD--Rasset sandy loam, 12 to 18 percent slopes

### **Rasset**

Extent: 90 percent of the unit

Landform(s): stream terraces

Slope gradient: 12 to 18 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated: 6e

Hydric soil: no Hydrologic group: A

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A 0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 15 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

Carver County, Minnesota

### **RW--Richwood silt loam**

### **Richwood**

Extent: 100 percent of the unit Landform(s): stream terraces Slope gradient: 0 to 2 percent

Parent material: silty or loamy sediments over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 1

Hydric soil: no Hydrologic group: B

Potential for frost action: high

Representativ	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A1,BA	0 to 15 in	silt loam	moderate	3.29 to 3.59 in	5.6 to 7.3
Bt	15 to 42 in	silt loam	moderate	4.89 to 5.98 in	5.6 to 7.3
BC	42 to 47 in	silt loam	moderately rapid	0.43 to 1.04 in	5.6 to 7.3
2C	47 to 60 in	very fine sand	rapid	0.65 to 0.91 in	6.1 to 7.8

Carver County, Minnesota

## SC2--Lester-Storden complex, 6 to 12 percent slopes, eroded

### Lester, eroded

Extent: 55 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6
Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Storden, eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 4L

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 86

Parent material: till Kw factor (surface layer) .32

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk	7 to 55 in	loam	moderate	7.20 to 9.13 in	7.4 to 8.4
C 5	55 to 80 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4



Carver County, Minnesota

## SD2--Lester-Storden complex, 12 to 18 percent slopes, eroded

### Lester, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4

### Storden, eroded

Extent: 35 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 4L

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 86

Parent material: till Kw factor (surface layer) .32

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ар	0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk	7 to 55 in	loam	moderate	7.20 to 9.13 in	7.4 to 8.4
C 5	55 to 80 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4



Carver County, Minnesota

## SV--Spillville loam, occasionally flooded

## Spillville, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent

Wind erodibility index (WEI): 48

Parent material: alluvium

Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2w

Flooding: occasional

Hydric soil: no

Ponding: none Hydrologic group: B/D

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:		Texture	Permeability	capacity	рН
Ap,A1,A2,A3	0 to 40 in	loam	moderate	7.63 to 8.43 in	5.6 to 7.3
C	40 to 60 in	loam	moderately rapid	2.95 to 3.54 in	5.6 to 7.3

## TB--Terril loam, 0 to 6 percent slopes

Drainage class: moderately well drained

### **Terril**

Extent: 90 percent of the unit

Landform(s): moraines, stream terraces

Slope gradient: 0 to 6 percent

Parent material: colluvium over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A1 0 to 27 in	loam	moderate	5.43 to 5.98 in	6.1 to 7.3
A2,BA 27 to 40 in	loam	moderate	2.21 to 2.47 in	6.1 to 7.3
Bw 40 to 63 in	loam	moderate	3.65 to 4.11 in	6.1 to 7.3
C 63 to 80 in	loam	moderate	2.54 to 3.22 in	7.4 to 8.4



Available water

Carver County, Minnesota

## TC--Terril loam, 6 to 12 percent slopes

#### Terril

Extent: 90 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines, stream terraces Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: colluvium over till

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A1 0 to 27 in	loam	moderate	5.43 to 5.98 in	6.1 to 7.3
A2,BA 27 to 40 in	loam	moderate	2.21 to 2.47 in	6.1 to 7.3
Bw 40 to 63 in	loam	moderate	3.65 to 4.11 in	6.1 to 7.3
C 63 to 80 in	loam	moderate	2.54 to 3.22 in	7.4 to 8.4

### TT--Talcot silty clay loam

### **Talcot**

Extent: 100 percent of the unit Soil loss tolerance (T factor): 3

Landform(s): swales, depressions on stream terraces Wind erodibility group (WEG): 4L

Slope gradient: 0 to 2 percent Wind erodibility index (WEI): 86

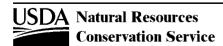
Parent material: silty or loamy deposits over outwash Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2w

Flooding: none Hydric soil: yes
Ponding: none Hydrologic group: B/D

Drainage class: poorly drained Potential for frost action: high

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A1,A2	0 to 23 in	silty clay loam	moderate	4.11 to 5.02 in	7.4 to 8.4
Bg 2	23 to 30 in	silty clay loam	moderate	1.20 to 1.42 in	7.4 to 8.4
2Cg 3	80 to 60 in	gravelly coarse sand	rapid	0.60 to 1.20 in	7.4 to 8.4



Carver County, Minnesota

## **US--Udipsamments**, sloping

## Udipsamments, sloping

Extent: 100 percent of the unit

Landform(s): stream terraces

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Slope gradient: 6 to 18 percent

Wind erodibility index (WEI): 134

Parent material: outwash or colluvium

Kw factor (surface layer) .05

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 8s

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: excessively drained Potential for frost action: low

Representative soil profile:	Texture	Permeability	capacity	рН
A 0 to 14 in	loamy sand	rapid	0.71 to 1.42 in	6.6 to 7.3
C 14 to 60 in	sand	rapid	2.28 to 3.65 in	6.6 to 7.3

### W--Water

### Water

Extent: 100 percent of the unit

Landform(s):

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Slope gradient: Wind erodibility index (WEI):

Parent material: Kw factor (surface layer)

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated:

Flooding: Hydric soil:

Ponding: Hydrologic group:

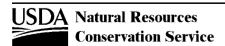
Drainage class: Potential for frost action:

Representative soil profile:

Texture

Permeability

Available water capacity pH



Available water

Carver County, Minnesota

## WA--Wadena loam, 0 to 2 percent slopes

#### Wadena

Extent: 90 percent of the unit Soil loss tolerance (T factor): 3

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 6

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2s

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: low

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A,AB 0 to 13 in	loam	moderate	2.60 to 2.86 in	6.1 to 7.3
Bw 13 to 30 in	loam	moderate	2.37 to 3.22 in	5.6 to 7.3
2BC,2C 30 to 60 in	coarse sand	rapid	0.60 to 1.20 in	6.6 to 8.4

## WB--Wadena loam, 2 to 6 percent slopes

#### Wadena

Extent: 90 percent of the unit

Soil loss tolerance (T factor): 3

Landform(s): stream terraces, moraines

Wind erodibility group (WEG): 6

Slope gradient: 2 to 6 percent Wind erodibility index (WEI): 48
Parent material: outwash Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2e

Flooding: none

Hydric soil: no

Hydrologic group: B

Representative	e soil profile:	Texture	Permeability	Available water capacity	рН
Ap,A,AB	0 to 13 in	loam	moderate	2.60 to 2.86 in	6.1 to 7.3
Bw	13 to 30 in	loam	moderate	2.37 to 3.22 in	5.6 to 7.3
2BC,2C	30 to 60 in	coarse sand	rapid	0.60 to 1.20 in	6.6 to 8.4



Carver County, Minnesota

# WC2--Wadena loam, 6 to 12 percent slopes, eroded

### Wadena, eroded

Extent: 90 percent of the unit Soil loss tolerance (T factor): 3

Landform(s): stream terraces, moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: outwash

Kw factor (surface layer) .28

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none Hydrologic group: B

Representative soil prof	ile: Texture	Permeability	Available water capacity	рН
Ap 0 to 10 ir	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw 10 to 25 ir	loam	moderate	2.15 to 2.92 in	5.6 to 7.3
2BC.2C 25 to 60 in	coarse sand	rapid	0.69 to 1.39 in	6.6 to 8.4

Carver County, Minnesota

## XB--Rasset-Lester complex, 2 to 6 percent slopes

#### Rasset

Extent: 55 percent of the unit

Soil loss tolerance (T factor): 3

Landform(s): moraines

Wind erodibility group (WEG): 3

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	86 to 80 in	sand	verv rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 45 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 5 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative so	oil profile:	Texture	Permeability	Available water capacity	рН
Ap 0	to 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bt 8 1	to 35 in	clay loam	moderate	4.07 to 5.16 in	5.1 to 7.3
BC 35	to 40 in	clay loam	moderate	0.72 to 0.97 in	6.1 to 7.8
C 40 1	to 60 in	loam	moderate	2.95 to 3.74 in	7.4 to 8.4



Carver County, Minnesota

## XC--Rasset-Lester complex, 6 to 12 percent slopes

#### Rasset

Extent: 60 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile.	Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

## XC2--Rasset-Lester complex, 6 to 12 percent slopes, eroded

### Rasset, eroded

Extent: 60 percent of the unit Soil loss tolerance (T factor): 3

Landform(s): moraines Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	e: Texture	Permeability	capacity	рН
Ap 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.1 to 7.3
Bt 8 to 20 in	sandy loam	moderately rapid	1.46 to 2.32 in	5.1 to 7.3
2BC 20 to 30 in	loamy sand	rapid	0.59 to 1.08 in	5.1 to 7.3
2C 30 to 80 in	sand	verv rapid	1.00 to 3.50 in	5.1 to 7.8

### Lester, eroded

Extent: 40 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24
Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	le: Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

## XD--Rasset-Lester complex, 12 to 18 percent slopes

#### Rasset

Extent: 65 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 6e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 35 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

## XE--Rasset-Lester complex, 18 to 25 percent slopes

#### Rasset

Extent: 65 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 18 to 25 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 7e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 35 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6e

Flooding: none

Hydric soil: no

Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
A 0	) to 5 in	loam	moderate	1.02 to 1.13 in	5.6 to 7.3
BE,Bt 5	5 to 34 in	clay loam	moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 34	1 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4
C 60	) to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

## YB--Rasset-Lester-Kilkenny complex, 2 to 6 percent slopes

#### Rasset

Extent: 55 percent of the unit

Soil loss tolerance (T factor): 3

Landform(s): moraines Wind erodibility group (WEG): 3

Slope gradient:2 to 6 percentWind erodibility index (WEI): 86Parent material:outwashKw factor (surface layer).15

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 25 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 2 to 5 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24
Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 2e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative so	il profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to	8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bt 8 to	35 in	clay loam	moderate	4.07 to 5.16 in	5.1 to 7.3
BC 35 to	40 in	clay loam	moderate	0.72 to 0.97 in	6.1 to 7.8
C 40 to	60 in	loam	moderate	2.95 to 3.74 in	7.4 to 8.4



Carver County, Minnesota

# YB--Rasset-Lester-Kilkenny complex, 2 to 6 percent slopes

## Kilkenny

Extent: 20 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 2 to 6 percent

Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 2e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: C/D

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	capacity	рН
Ap 0 to 11 in	loam	moderate	1.98 to 2.43 in	5.6 to 7.3
Bt 11 to 35 in	clay loam	moderately slow	3.60 to 4.56 in	5.1 to 7.3
2Bk,2C 35 to 80 in	loam	moderate	6.73 to 8.53 in	7.4 to 8.4



Carver County, Minnesota

# YC--Rasset-Lester-Kilkenny complex, 6 to 12 percent slopes

#### Rasset

Extent: 55 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 25 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	Available water capacity	рН
Ap	0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt	7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 3	88 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 6	60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

# YC--Rasset-Lester-Kilkenny complex, 6 to 12 percent slopes

## Kilkenny

Extent: 20 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: C

Representative soil profil	e: Texture	Permeability	Available water capacity	рН
Ap 0 to 9 in	loam	moderate	1.54 to 1.99 in	5.6 to 7.3
Bt 9 to 53 in	clay loam	moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC.2C 53 to 80 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4

Carver County, Minnesota

## YC2--Rasset-Lester-Kilkenny complex, 6 to 12 percent slopes, eroded

### Rasset, eroded

Extent: 55 percent of the unit Soil loss tolerance (T factor): 3

Landform(s): moraines Wind erodibility group (WEG): 3

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 86

Parent material: outwash

Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative so	il profile:	Te	exture	Permeability	Available water capacity	рН
Ap 0 t	o 8 in	sandy loam		moderately rapid	1.02 to 1.18 in	5.1 to 7.3
Bt 8 t	o 20 in	sandy loam		moderately rapid	1.46 to 2.32 in	5.1 to 7.3
2BC 20 t	o 30 in	loamy sand		rapid	0.59 to 1.08 in	5.1 to 7.3
2C 30 t	o 80 in	sand		very rapid	1.00 to 3.50 in	5.1 to 7.8

### Lester, eroded

Extent: 25 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: B

Representative soil profile:	Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

# YC2--Rasset-Lester-Kilkenny complex, 6 to 12 percent slopes, eroded

## Kilkenny, eroded

Extent: 20 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 6 to 12 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 3e

Flooding: none

Hydric soil: no

Ponding: none

Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representativ	e soil profile:	Texture	Permeability	capacity	рН
Ap	0 to 9 in	loam	moderate	1.54 to 1.99 in	5.6 to 7.3
Bt	9 to 53 in	clay loam	moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC,2C	53 to 80 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4



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Carver County, Minnesota

## YD--Rasset-Lester-Kilkenny complex, 12 to 18 percent slopes

#### Rasset

Soil loss tolerance (T factor): 3 Extent: 55 percent of the unit Landform(s): moraines Wind erodibility group (WEG): 3

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 86

Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 6e

Flooding: none Hydric soil: no Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 25 percent of the unit Soil loss tolerance (T factor): 5 Landform(s): moraines Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Slope gradient: 12 to 18 percent Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 4e

Hydric soil: no Flooding: none Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil profile	le: Texture	Permeability	Available water capacity	рН
Ap 0 to 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bt 7 to 38 in	clay loam	moderate	4.67 to 5.91 in	5.1 to 7.3
Bk 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4
C 60 to 80 in	loam	moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

# YD--Rasset-Lester-Kilkenny complex, 12 to 18 percent slopes

## **Kilkenny**

Extent: 20 percent of the unit

Soil loss tolerance (T factor): 5

Landform(s): moraines

Wind erodibility group (WEG): 6

Slope gradient: 12 to 18 percent Wind erodibility index (WEI): 48

Parent material: till Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 4e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representativ	re soil profile:	Texture	Permeability	capacity	рН
Ap	0 to 9 in	loam	moderate	1.54 to 1.99 in	5.6 to 7.3
Bt	9 to 53 in	clay loam	moderately slow	6.61 to 8.38 in	5.1 to 7.3
2BC,2C	53 to 80 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4



Carver County, Minnesota

## YE--Rasset-Lester-Kilkenny complex, 18 to 25 percent slopes

#### Rasset

Extent: 55 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Slope gradient: 18 to 25 percent Wind erodibility index (WEI): 86
Parent material: outwash Kw factor (surface layer) .15

Restrictive feature(s): greater than 60 inches Land capability, nonirrigated: 7e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: A

Drainage class: well drained Potential for frost action: moderate

Representative	soil profile:	Texture	Permeability	capacity	pН
Ap,A	0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.1 to 7.3
Bt 1	5 to 28 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.1 to 7.3
2BC 2	28 to 36 in	loamy sand	rapid	0.47 to 0.87 in	5.1 to 7.3
2C 3	36 to 80 in	sand	very rapid	0.88 to 3.09 in	5.1 to 7.8

#### Lester

Extent: 25 percent of the unit Soil loss tolerance (T factor): 5

Landform(s): moraines Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .20

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated: 6e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: B

Drainage class: well drained Potential for frost action: moderate

Representative soil p	orofile:	Texture	Permeability	Available water capacity	рН
A 0 to 5	5 in loam		moderate	1.02 to 1.13 in	5.6 to 7.3
BE,Bt 5 to 3	34 in clay loam		moderate	4.31 to 5.46 in	5.1 to 7.3
Bk 34 to 6	60 in loam		moderate	3.90 to 4.94 in	7.4 to 8.4
C 60 to 8	30 in loam		moderate	3.01 to 3.81 in	7.4 to 8.4



Carver County, Minnesota

# YE--Rasset-Lester-Kilkenny complex, 18 to 25 percent slopes

## Kilkenny

Extent: 20 percent of the unit

Landform(s): moraines

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Slope gradient: 18 to 25 percent

Wind erodibility index (WEI): 48

Parent material: till

Kw factor (surface layer) .24

Restrictive feature(s): greater than 60 inches

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Flooding: none Hydric soil: no
Ponding: none Hydrologic group: C

Drainage class: moderately well drained Potential for frost action: moderate

Representative soil profile:	Texture	Permeability	Available water capacity	рН
A 0 to 7 in	loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt 7 to 31 in	clay loam	moderately slow	3.60 to 4.56 in	5.1 to 7.3
2Bk.2C 31 to 80 in	loam	moderate	7.32 to 9.28 in	7.4 to 8.4

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.

